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APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,061 06/15/2005		06/15/2005	Kai Schumacher	272642US0XPCT 4278	
22850	7590	12/15/2006		EXAMINER	
C. IRVIN N	ICCLEL	LAND	GREEN, ANTHONY J		
OBLON, SP	IVAK, M	CCLELLAND, MAI		, , , , , , , , , , , , , , , , , , , 	
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DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Examiner								
Examiner Anthony J. Green 1755		Application No.	Applicant(s)					
Authony J. Green 1755 Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER. FROM THE MAILING DATE OF THIS COMMUNICATION. 18 No proof for reply is specified above. The macround instruction. 18 No proof for reply is specified above. The macround instruction. 18 No proof for reply is specified above. The macround institution period will apply and upper SIX (6) MONTHS from the mailing date of this communication. 18 No proof for reply is specified above. The macround institution period will apply and upper SIX (6) MONTHS from the mailing date of this communication. 18 No proof for reply is specified above. The macround institution period will apply and upper SIX (6) MONTHS from the mailing date of this communication. 18 No proof for reply is specified above. The macround institution period will apply and upper SIX (6) MONTHS from the mailing date of this communication. 19 No proof for reply is specified above. The macround plant from the mailing date of this communication. 20 No proof for the communication of the communication of the communication. 21 No proof for the communication of the communication of the communication. 22 No proof for the communication of the communication of the communication. 23 No since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. 23 Disposition of Claims 4 No claim(s) 1-13.15 and 16 is/are pending in the application. 4 No claim(s) 1-13.15 and 16 is/are allowed. 4 No claim(s) 1-13.15 and 16 is/are allowed. 5 No claim(s) 19 is/are objected to by the Examiner. 6 No claim(s) 19 is/are objected to by the Examiner. 10 The drawing(s) filed on 15 June 2005 is/are: a) accepted or b) objected to by the Examiner. 10 The drawing(s) filed on 15 June 2005 is/are: a) accepted or b) objected to by the Examiner. 10 No claim of the drawing(s) is objected to by the Exam		10/539,061	SCHUMACHER ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be evaluate under the provised of 37 CFR 1:160, in no event, however, may a reply be timely filed 1 th Quencid for reply is appelled above, the maxemum statutory period will apply and will expire SLX (b) MONTHS from the mailing date of this communication. 1 file Quencid for reply is appelled above, the maxemum statutory period will apply and will expire SLX (b) MONTHS from the mailing date of this communication. 1 file Quencid for reply is appelled above, the maxemum statutory period will apply and will expire SLX (b) MONTHS from the mailing date of this communication. 2 fault in the occurrence of this communication of the communication of the communication of the communication. 2 fault in the communication of the communication is maxemum statutory period will apply and under the properties of the communication. 3	Office Action Summary	Examiner	Art Unit					
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WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNCATION. Extensions of time may be available under the provisions of 37 ERT 1:18(i). In ne event, however, may a reply be timely fied after 10x (6) MOINTIS from the mailing date of this communication. Failure in regive yield in the size of reading date of this communication, and it is pays and will expire 3X (6) MOINTIS from the mailing date of this communication. Failure in regive which the size of venture depend for revented period for reve		ears on the cover sheet with the	e correspondence address					
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12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application	The oath or declaration is objected to by the Ex	aminer. Note the attached Offi	ce Action of IoIIII PTO-132.					
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DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment submitted on 16 October 2006. Claims 1-13 and 15-16 are currently pending. Based on applicant's submission of a declaration under 37 CFR 1.132 the art rejection is overcome.

Claim Objections

2. Claim 10 is objected to because of the following informalities: In claim 10, line 6, the term "asubsequently" should be -- a subsequently --. The claim does not end in a period. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 10-12 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10 the use of the term "desired" renders the claim vague and indefinite.

In lines 6-7 the phrase "the product" lacks proper antecedent basis. The phrase "the reaction mixture" lacks proper antecedent basis. It is unclear as to what is meant by "in the presence of secondary air". Does this mean that "primary air" is present? The phrase "the gaseous reaction products" lacks proper antecedent basis. The phrase "the

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ratio of primary air to secondary air...core hydrogen....titanium dioxide precursor to secondary air is greater than 0.5" lacks proper antecedent basis as nowhere in the claim is primary air, core hydrogen, or a titanium dioxide precursor previously referred to.

Allowable Subject Matter

- 5. Claims 1-9, 13 and 16 are allowed.
- 6. Claims 10-12 and 15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony J. Green
Primary Examiner
Art Unit 1755

ajg November 29, 2006